

L6 ANSWER 25 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:186026 CAPLUS
DOCUMENT NUMBER: 134:219381
TITLE: Minimally invasive methods for measuring analytes in vivo
INVENTOR(S): Bell, Michael L.; McNeal, Jack D.
PATENT ASSIGNEE(S): Beckman Coulter, Inc., USA
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001018543 ✓	A1	20010315	WO 2000-US24438	20000906
W: JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6366793	B1	20020402	US 1999-393738	19990910
EP 1129353	A1	20010905	EP 2000-959941	20000906
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2003508186	T	20030304	JP 2001-522081	20000906
PRIORITY APPLN. INFO.:			US 1999-393738	A 19990910
			WO 2000-US24438	W 20000906

AB Minimally invasive methods for measuring an analyte, such as glucose, contained in the interstitial fluid of a body are provided. The methods include the steps of: (a) providing at least one sensor particle capable of generating a detectable analyte signal in responding to the analyte concentration of the body, (b) placing the sensor particle into the skin of the body for allowing the sensor particle to be in contact with the interstitial fluid of the body to generate the detectable analyte signal, (c) detecting the generated analyte signal, and (d) determining the concentration of

the analyte contained in the interstitial fluid. The sensor particles may be made to be responsive to an analyte such as glucose concentration contained in

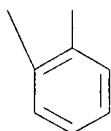
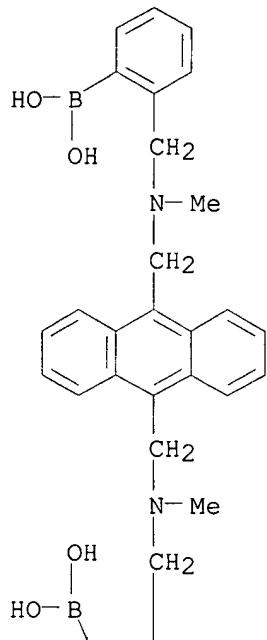
a body fluid by including a photo-induced electron transfer receptor specific for the analyte in the sensor particle.

IT 162254-07-1

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(minimally invasive methods for measuring analytes in vivo)

RN 162254-07-1 CAPLUS

CN Boronic acid, [9,10-anthracenediylbis[methylene(methylenimino)methylene-2,1-phenylene]]bis- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 26 OF 32 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 1996:334502 CAPLUS
 DOCUMENT NUMBER: 125:80937
 TITLE: Molecular design of artificial sugar sensing systems
 AUTHOR(S): Shinkai, Seiji; Takeuchi, Makayuki
 CORPORATE SOURCE: Professor Chem. Dep. Chem. Sci. Technol., Faculty
 Eng., Kyushu Univ., Fukuoka, 812, Japan
 SOURCE: TrAC, Trends in Analytical Chemistry (1996), 15(5),
 188-194
 CODEN: TTAEDJ; ISSN: 0165-9936
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB For the development of new receptor mols. that can precisely recognize sugar mols., we synthesized a number of diboronic acids. Since one boronic acid can react with two OH groups (one diol group) to form a boronate ester, one diboronic acid can immobilize two diol units to form a sugar-containing macrocycle. The selectivity can be tuned by the relative spatial position of the two boronic acids and the complexation event can be read out by CD spectroscopy. When a boronic acid group is combined intramolecularly with an aminomethyl fluorophore, the complexation event can be conveniently read out by fluorescence spectroscopy. This is a novel application of a PET (photoinduced electron transfer) sensor: the